

IX. THE NEIGHBORS

A. Bob and Beverly McMullin

706. Robert “Bob” McMullin lives with his wife, Beverly, in a 130 year old farmhouse at Mad River Stables, 170 Old Route, 100 Moretown, VT. The property consists of 25 acres, a 100 year old horse barn, and an indoor riding arena. Currently the indoor arena is pending repairs after collapsing on January 3rd of 2008. There are other outbuildings on the property as well.
707. Mr. McMullin is retired from the US Air Force where he held various command and staff positions in the communications field. He has also worked for the Vermont Agency of Transportation for several years as the State Aviation Administrator. He and his wife also had owned and operated Mill Brook Real Estate in Waitsfield, Vermont and they had also owned The Tack Exchange in Waterbury, Vermont, which his wife operated.
708. The McMullins lease the horse related facilities (barn, pastures, riding paths, riding arenas) to Barbara Ferris who operates it as a horse riding, training, and boarding facility. Mr. McMullin maintains the facilities – mows the pastures, repairs the fences and buildings, moves a lot of snow around and hires out for anything that is beyond his capabilities.
709. Other types of activities that have taken place on the McMullins’ property range from a wedding that they hosted for former neighbors, to fundraising barn dances in the arena.

They have also provided the location for a horse drawn sleigh ride business which attracted hundreds of visitors to the farm.

710. In the past, they raised Montedale sheep and, at one time, kept and milked several goats. Mrs. McMullin also bred and raised thoroughbred and warmblood horses over a period of about 12 years.
711. In the summertime, Mr. McMullin takes walks on a path that circles the farm along the river and through the woods or on another path along the river that he cleared and maintains that runs from the farm south past the Sainsburys' farm. He even had a bridge built across a culvert outlet to facilitate use of the path by walkers and riders. Their neighbors, Jack Byrne and Virginia Farley, ski on the path. Friends from the Stevens Brook Road area ride their horses to the farm and on the path.
712. The McMullins also had a screened-in porch built on their house a year or two after they moved in. They enjoy eating their meals and entertaining guests on the porch in the summer. They also enjoy watching and listening to the birds at the feeders adjacent to the porch and listening to the flow of the river. There is also a day bed on the porch, and Mr. McMullin enjoys relaxing, reading and napping there.
713. If the proposed quarry is permitted and goes into operation, the noise will adversely affect Bob McMullin's quality of living and his use and enjoyment of his property. The noise from the accelerating and decelerating trucks approaching and departing the quarry on Route 100B and on the haul road, the noise from rock crushing, the noise from trucks being loaded, the noise from rock drills and other equipment, and the occasional noise from blasting would make it impossible to relax and enjoy the natural sound environment

(birds, river, wind) that he and his wife Beverly currently enjoy and that they had expected to continue to enjoy in the agricultural-residential zone.

714. Beverly McMullin is retired. She, along with her husband, formerly owned and operated The Tack Exchange, an equestrian supply store in Waterbury, VT. Prior to that, she was a real estate broker and owned The Mill Brook Real Estate office in Waitsfield, VT. She and her husband started that business and she continued it after he went to work for AOT. She bred and raised thoroughbred and warmblood horses over a period of about 12 years.
715. Mrs. McMullin now oversees the operation of the farm and with her husband spends many hours outdoors in most seasons operating and enjoying their property. They enjoy the wildlife, such as the birds, deer, squirrels, chipmunks, even the woodchucks. They spend some time tending vegetables and flowers, but mostly operation of the farm involves repairing and rearranging fences, gates and the interior of the barn. During the winter months lots of time is spent moving and shoveling snow. Mrs. McMullin also does some work at home as she is on the Boards of two statewide organizations, the Vermont Farm Bureau and the Vermont Horse Council.
716. The McMullins have also spent in excess of \$200,000 in improvements and equipment directly related to the equestrian facility and if they are no longer able to operate or rent the property as an equestrian facility because of a quarry operating in the immediate vicinity they will lose their investment and be unable to sell the facility as an equestrian business.
717. There would also be a perception of increased risk and unpleasantness because of the noise from the quarry that would deter people from coming to the farm to ride or board their horses.

718. Mrs. McMullin has also suggested to the Applicant that there could be acceptable uses for his property that would be compatible with the neighborhood. At both the DRB and the Act 250 hearings she told the Applicant that she would welcome him to the neighborhood if he would come and build houses instead of a quarry.

B. Karen Sharpwolf

719. Karen Sharpwolf has lived at 247 Honan Road, located off of Moretown Common Road in Moretown for 9 years. Her home was purchased in 1999. Karen resides with her husband Steve and four year old daughter Sophia.

720. During the summer, Karen stays home most of the time to care for her daughter Sophia. They spend most of the day outside, when the weather allows it, as they love to garden. They grow vegetables, perennials and fruit.

721. The Sharpwolf property includes three acres of open meadows and gardens on a flat area, and the land slopes downhill to the west near the Mad River. They have a total of fifteen and a half acres and they live in their yellow house with a large deck that faces west. Aside from growing vegetables, perennials and fruit, they snowshoe, ski and walk in the fields and forests around their house. If the quarry is permitted as proposed by the Applicant, it will be to the West of the Sharpwolf home.

722. There was a Court site visit to the Sharpwolf home in September of 2007. The weather was clear and the proposed quarry site was in plain view from the Sharpwolf property. The Rivers people set off one flare, which was completely visible. Rivers also had machinery operating on the property during the site visit and it was clearly audible from the Sharpwolf property. At both site visits, it was pointed out that the Sharpwolf property is clearly visible from the Rivers' property.

723. From several rooms in the Sharpwolf home, including the deck, living room, master bedroom and child's bedroom, one can look out in a westerly direction at four completely forested foothills and Camel's Hump rising above them in the center of the view. If the proposed quarry is permitted and goes into operation, it will be smack dab in the center of the view. In other words, when looking toward Camel's Hump, you will look directly at the proposed quarry. The house is virtually built around the view towards Camel's Hump.
724. Karen Sharpwolf and her husband purchased the property specifically because of the peace and quiet. Most of the sounds that are currently heard on their property are birds, wind, the neighbors' sheep and the sounds of their daughter. There are cars, trucks, and dump trucks that travel along Route 100B, but there are also intervals with no traffic. The trucks that travel on 100B can be heard, especially when braking.
725. Karen Sharpwolf worries that if the proposed quarry is permitted and goes into operation, the noise will be similar to what was heard during the September site visit, which was the sound of metal hitting rock. This was clearly heard from their property. A fair assumption would be that the quarry would be at least as loud as the sounds heard during the site visit, as just one piece of equipment was used at that time. An actual operating quarry would add additional truck traffic. Trucks traveling at 40 – 50 mph on Route 100B are very different from trucks traveling up and down the haul road. The trucks on the proposed haul road would be grinding up the steep incline and then downshifting and "jake" braking down the slope. Karen is concerned not just about the number of trucks at the proposed quarry, but also the quality of the truck sound.

C. Jack Byrne

726. Jack Byrne testified before the Court. Jack Byrne and his wife, Virginia Farley, reside on a one-third of an acre located at 173 Old Route 100. Byrne and Farley bought their house in 1987 and have resided there for 21 years.
727. Jack Byrne and Virginia Farley moved to their present residence after their marriage in 1985. They added a front porch to the southeast side of the house in 1986. In 1988 they had a child and began to plan an addition to the house. Around 1998 they added a two-story addition to provide more space for their family and added a second porch on the southwest side of the house. The addition increased their living space from about 1100 square feet to 1700 square feet, providing a new bedroom for their daughter, Hilary, a guest room and extra living space for their family.
728. Over the years Byrne and Farley have added flower gardens and landscaping along three sides of the house and in several other places around their yard. They have also planted several trees for shade and aesthetic purposes and planted and maintained vegetable gardens at various locations around the yard as well.
729. The Byrne/Farley property sits on a terrace along the Mad River at the base of a hillside that slopes down from the proposed quarry site. Their property is bordered on three sides by the McMullins' horse pastures and Old Route 100. Route 100B runs behind their property and there is a pasture at the top of a hill about 350 feet from their house.
730. Byrne and Farley live across from the Mad River Stables, and frequently see people come and go from the stables to take care of their horses, ride horses, take lessons and feed the horses. When the horses are not being used, they are often in the pastures surrounding the Byrne/Farley yard and often come to the edge of their property to check things out or

look for something new to munch on. People, often women and children, walk their horses to and from the pastures by the Byrne/Farley's house and occasionally stop and chat about things.

731. There is a wooded area to the north several hundred feet down the road from the Byrne/Farley residence, with a path through it to the river. Byrne and Farley often go there with Hilary in the summer for a swim or to fish because it is a beautiful little spot with a gravel beach, good fish habitat and some deep spots to swim in. They often walk or run as a family, or individually, from their house down the road, out to Route 100B, head north or south and then return. Sometimes they go "around the block" from their house out to Route 100B, then along Route 100B to the other end of their road and back. They often see some of their neighbors and friends out on Route 100B running, or riding, or walking their dogs. Sometimes Byrne and Farley see them from their porch looking up to Route 100B, and sometimes they will holler hello to the ByrneFarleys as they go by when they are on their side of the road.

732. In the summer Byrne and Farley work on their gardens. They have an area with a volleyball net where they play volleyball and badminton. They spend a lot of time on the southwest porch, which runs the length of the house on that side, entertaining friends, having meals and enjoying the view across and up the river. They are outside a lot during the summer months. They also have access to the McMullins' property and often walk along the river or go swimming or fishing at various places.

733. In the summer and fall Byrne and Farley often have visits from family members and friends who live out of state. They come to enjoy the great scenery and amenities and Byrne and Farley will often go biking, or walking, or swimming, with their guests, right

from their house. Byrne and Farley often cook out and hang out on their porch and just catch up and socialize with each other. They often celebrate birthdays, graduations, and other important life events in their house, outside in the yard and on the porches. They use the house as a place to eat, sleep and relax, and to be with each other as a family.

734. Mr. Byrne works at Middlebury College, which is a 50 mile commute. The college allows him to work at home at least one day a week to reduce the time and costs for commuting. During those days when he works at home, he is on the phone conducting business, writing on his computer or reading and doing other things related to work. On the days when he travels to Middlebury, he often spends several hours in the morning, usually from around 6:30 A.M. to 9:00 or 10:00 A.M. reading and responding to e-mail, writing and doing other things for his job before he leaves. That is because when he is at the college, much of his time during the day is spent meeting and interacting with students, faculty and staff all around the campus and he finds it more productive to take care of the tasks that require quiet concentration and reflection and thought in the morning before heading off to the campus. During the summer Mr. Byrne works at home more frequently since the students are away and there is less demand for his time. He also takes more vacation time during the summer, some of which he spends just being at home and around the neighborhood biking, swimming, walking and relaxing.

735. The proposed quarry would affect the Byrne/Farleys' use and enjoyment of their property and the surrounding area because there would be a considerable concentration of new noise coming from the location of the proposed quarry due to truck traffic going into and out of the proposed quarry's curb cut and ascending and descending the proposed quarry road. This noise would include noise coming from the truck's brakes including so-called

“jake” brakes), gear grinding and down throttling. There would also be a considerable amount of new noise from rock blasting, crushing and drilling, and back up warning beepers.

736. That kind of noise would certainly be a distraction and interfere with Mr. Byrne’s work related phone conversations, quiet reflection and writing. It would intrude on his concentration and ability to carry on a phone conversation and distract him—especially when sitting out on the porch to work, which he often does when the weather is nice. The proposed quarry would also negatively affect Byrne and Farley’s use and enjoyment of their yard and the porch by them and their family, guests and visitors who are with them during their visits and vacations. The proposed quarry would affect their ability to converse with each other and to simply appreciate the clean, quiet and peaceful experience that they often have now.
737. This concentration of industrial-type activity would affect the air that they breathe as it will contain more particulates from truck exhaust and dust from crushing and drilling and that will significantly diminish the use and enjoyment their property and the surrounding area.
738. The concentration of truck traffic and activity will also make it much less pleasant to go “around the block” or out on Route 100B for a walk or run or bike ride, and that will create a sense of confinement that will probably cause them to get in their car and drive elsewhere to do these kinds of activities. The proposed quarry will likely deter similar uses by others and mean that they will see fewer neighbors and friends passing by and yelling hello to them when they are out on the porch or working in the yard. The Byrne/Farleys also know that many people would cease to continue boarding or riding

their horses across the road due to the increased risk of an accident from a horse being startled by the quarry noises. That would diminish the social richness and interaction that Jack Byrne and Virginia Farley and their daughter Hilary currently enjoy in their neighborhood, and it would make their neighborhood feel lonely and empty.

D. Robert Seth Dansker

739. Robert Seth Dansker testified before the Court. Mr. Dansker (“Dansker”) resides at 420 Stevens Brook in Moretown. He owns 627 acres that stretch north from his house along the Stevens Brook Road to the top of Cobb Hill. The land is varied, beautiful, and exceptionally quiet; there are old foundations and rock walls beside sloping pastures, wetlands, and timber stands that are interconnected by a web of hiking trails that Mr. Dansker maintains.
740. Mr. Dansker walks and hikes on the trails regularly, especially during the summer. His family and friends also regularly use these hiking trails. Over the last 31 years, he has worked with the County Forester and an independent consultant to put into action a multi-use management plan that improves the health and productivity of the forest while maintaining the aesthetics of the land and developing its recreational value.
741. Mr. Dansker’s land shares a very long border with the parcel owned by Rivers. The proposed quarry gets closer and closer to his property as it moves through the proposed phases of operation. If the proposed quarry is permitted and goes into operation, the quarry will introduce a constant level of noise that will replace the remarkable quiet that now exists on the hill. The portion of Mr. Dansker’s land that runs along the Rivers’ parcel is narrow; there is no buffer available to get away from the noise. The evidence provided by Rivers shows a doubling of the noise along the very long border that is

shared by Rivers and Dansker. It also shows substantially higher levels—up to at least 70 decibels—when non-continuous sources are included. These are the baseline increases as proposed by Rivers. The expert testimony supplied by the Neighbors is that Rivers understates the noise impacts of his proposal.

742. A doubling (or more) of noise is inconsistent with the way Mr. Dansker uses his land now and with the goals of his management plan. By itself, the immediate loss of peace and quiet that Mr. Dansker enjoys with my family, friends and neighbors would be devastating. Looking further, timberland ownership is not practical any longer without development of recreational potential. There were formerly dozens of timber mills along Mr. Dansker's stretch of the Mad River Valley, which are no longer there. A new economy has grown up that depends upon the aesthetics and recreational value of woodlands. These values are incompatible with a doubling (or more) of noise levels.
743. It is Mr. Dansker's hope that the Court will uphold the decisions of the DRB and District Commission.

E. John Gallagher

744. John Gallagher lives at 2987 Moretown Common Road. He is a member of the Common Road Area Group who received party status during the local permit review and retained party status with this group in the appeal proceedings. (See Environmental Court decision dated July 3, 2007)
745. Mr. Gallagher provided testimony on February 21, 2008 as to how the Planning Commission produced the Moretown Town Plan (R-33) and Moretown Zoning Regulations (R-34) and how the documents are used. Mr. Gallagher was a member of the Planning Commission for seven years who prepared these documents.

746. The production of these documents is an ongoing process as they must be periodically updated to comply with state regulations and to respond to new issues. Public input is provided via question sheets at the town hall at elections and during public meetings. The planning commission reviews the current documents, reviews documents of adjacent towns and sometimes hires professional help. It is a long and cumbersome process due to the varied interests and opinions of board members and voters. The Planning Commission continually strives to understand and evaluate growth and change in the town, and to provide direction that will make overall sense.
747. The strategy of the Planning Commission is to make the best use of the limited time during meetings by producing documents that provide guidelines and stressing what the goals are so that the Development Review Board can review each permit application with the necessary standards and at the same time be simple enough so that the average person can determine the suitability of their project for a their particular area.
748. The review process standards must provide directions for the DRB to evaluate how a particular project fits in a particular location. The standards have to be applicable to all the various zoning districts and also to the different areas of these districts. One of the conditional use standards that must be met is that no adverse effects are to result to the character of an area. This standard is always mentioned as relevant when reviewing a permit application or a variance request. This standard concerning character is probably the primary and most basic condition that must be met for approval. (Reference R-34 page 30 Section 5.2(C)(2))
749. It becomes important to understand what the character of a specific area is, if you are to determine if there will be an adverse effect upon it. It is very obvious what the character

of the proposed quarry location is. A simple drive through will show that nothing exists that is similar to what is involved with a rock quarry.

750. In addition, the Route 100B scenic Corridor is mentioned repeatedly in the Town Plan and it is stated that it is a resource that is to be protected, with suggestions for specific standards to be considered for this area. (Reference R-33 page 31 and page 68 Land Use Policy #5)

751. If the proposed quarry with the associated blasting, crushing and truck traffic off and onto Route 100B were to be permitted, it would significantly affect the character of the area. The character would not be what it was prior to the quarry, and consequently additional development that was previously inappropriate could now be argued as being appropriate. These types of developments would then cause a total makeover of the character of the Route 100B Scenic Corridor.

752. This is entirely in the opposite direction for this area as envisioned by the town's planners and various board members and as voted upon by the town. I can think of other locations in the town where this project would probably be permitted, but this location has to be one of the most unsuitable. The long term effects would negate years of work done by the town's board members and would set a precedent whereby the documents produced by the town could be regarded as mostly irrelevant.

F. Arthur and Linda Hendrickson

753. Arthur Hendrickson was born and brought up in Barre Vt. where he graduated from Spaulding High School. His courses included algebra, algebra II, geometry, and physics. After graduation he worked at many jobs, such as house painter, surveyor's helper and service station attendant. He spent three years in the army as a tracked vehicle mechanic

with the rank of Specialist 5, E5, a rank equivalent to Sergeant. In 1967 he started work at General Electric in Burlington, VT working in assembly and in quality control on complex armament equipment for the government. He retired in 1998 after 31 years from General Dynamics, the company that had ultimately taken over the business. For several years while working for GE Mr. Hendrickson was on the grievance committee of IUE Local 248 representing the hourly workers. (Testimony of Arthur Hendrickson)

754. Arthur and his wife Linda reside at 495 Old Route 100 in Moretown, VT, across Route 100B from the proposed quarry. They have lived in their home for 35 years. Their property borders the Mad River on the east, the McMullin horse farm to the south, Route 100B to the west, and a residential property to the north. The Hendricksons raised their two children in their home. The children are now grown up and on their own. Linda will join Arthur in retirement in a couple of years. (Testimony of Arthur Hendrickson)
755. The Hendricksons' neighborhood is a wonderful and beautiful place to live and play. Their neighborhood's character has not changed much since they built their house 35 years ago. Some new homes have been constructed and others renovated along Route 100B and nearby Longley Road. All of them have enhanced the neighborhood. The Mad River, with all its attributes, has improved because it is much cleaner now than when the Hendricksons first moved here. (Testimony of Arthur Hendrickson)
756. The traffic that passes by on Route 100B has peaks in the morning and afternoon. Most of it is commuter car traffic. During the day the traffic is a mix consisting mostly of cars and light delivery type trucks. The Hendricksons presently do not have large numbers of heavy trucks passing by their home. (Testimony of Arthur Hendrickson)

757. The existing traffic noise does not bother the Hendricksons, because the traffic that moves past their property is quickly gone. (Testimony of Arthur Hendrickson)
758. Trucks stopping on Route 100B at the proposed quarry would bother the Hendricksons. The trucks entering from the north would be gearing down to access the haul road. Art and Linda would hear them grinding up the haul road to the quarry, and braking coming down the haul road from the quarry. Any truck exiting the quarry headed north would create a great deal of noise going up through the gears trying to get up to highway speed. These are all loud, long duration truck noises that the Hendricksons do not currently experience. (Testimony of Arthur Hendrickson)
759. Besides the noise, trucks will cause an air pollution problem. They would create a health risk to the residents of nearby homes, especially the ones down gradient from Route 100B, like the Hendricksons' home. The worst times would be during air inversions which are frequent in the Mad River valley. Truck exhaust is a carcinogen and the particulate matter from diesel exhaust settles to lower elevations during air inversions.
760. The dust created by the trucks would not only be a health risk it would also be a nuisance. Presently the most enjoyable part of Art and Linda's property is their back deck and yard that faces Route 100B. Dust would accumulate there and likely infiltrate their home. (Testimony of Arthur Hendrickson)
761. Rivers' application states there will be dust suppression but there will still be dust that will impact the Hendricksons. Mr. Hendrickson has visited many quarries in the last four years and has witnessed the trucks shedding dust from the loads whether they are covered or not. There is also dust that comes from the tires and undercarriages. Near the intersections of the haul roads there is always dust on the vegetation and spilled pebbles

in and along the highways. After the water from dust suppression efforts evaporates dust remains and is swirled up by all passing traffic. Mr. Hendrickson witnessed dust suppression efforts at the Whitcomb quarry in Winooski. The dump trucks were tracking muddy water out onto Route 7. (Testimony of Arthur Hendrickson)

762. If the proposed quarry is permitted, the quarry activities will bother Art and Linda. There would be daylong noise created from drilling, blasting, crushing, excavators working at the blast site, excavators loading trucks, and the trucks accessing and traveling on the haul road. (Testimony of Arthur Hendrickson)
763. Art and Linda will hear quarry noise at their residence, as evidenced by the applicant's own equine expert, Mr. Peebles. Mr. Peebles testified that clanging and banging from the landfill near his farm is heard all over his property above the traffic passing by on busy Route 46 by his farm in New Jersey. (Testimony of Arthur Hendrickson)
764. There will be a risk to Art and Linda's water supply if the proposed quarry is permitted and goes into operation, both of contamination and reduction in yield. If the proposed quarry pollutes their well or reduces its yield, the Hendricksons will be left without a water supply and will have to move, because they have no other water source and cannot replace the well they have now. (Testimony of Arthur Hendrickson)
765. There is also a risk from blasting. Blasting is not the one second interruption ten or twelve times a year the applicant contends. After Art and Linda feel the air blast and ground vibration there would be several seconds of terror after every blast knowing that errant flyrock might be about to fall, injuring them, killing them, or damaging their home or those of their neighbors. (Testimony of Arthur Hendrickson)

766. If this quarry is approved it would have a major negative affect on Art and Linda Hendrickson. It would compromise their safety, as their home is within the 1500 foot distance within which the Applicant's blasting expert, Mr. Rath, recommended that all persons remain inside or under cover during blasts.
767. Art and Linda are looking forward to having a long, enjoyable retirement. Being able to peacefully enjoy their property is very important to them. Mr. Rivers' proposed quarry would ruin their enjoyment of their retirement years, which they intend to spend in peaceful relaxation and enjoyment on their property surrounded by neighbors and friends. Their neighborhood currently has no heavy industry or industrial activity and the addition of a large industrial quarry across the street would destroy their ability to use and enjoy their home and land in peace and quiet. Art and Linda Hendrickson hope that this honorable Court will protect their quality of life by upholding the decisions of the DRB and the District Commission. (Testimony of Arthur Hendrickson)

G. Ben and Denise Sanders

768. Benjamin Sanders lives at 3549 Route 100B Moretown with his wife Denise. They have lived there for over twenty years. Mr. Sanders pointed out his home on the large map, adjacent to Rivers' property to the south. (N-31 and Ben Sanders Testimony)
769. The Sanders prepared an "Impact Calendar," admitted as N.8 and created by Mrs. Sanders. These boards depict the Applicant's own data, showing what is currently on the site and what new land use is proposed.
770. Mr. Sanders has been to every hearing at all levels, has read all filings, discovery, and reports produced by all parties and has worked closely with his attorneys and experts throughout all the proceedings. (N-31 and Ben Sanders Testimony)

771. Mr. Sanders is an Information Technology Auditor for National Life Group in Montpelier. Mr. Sanders is a Certified Public Accountant, a Certified Information Systems Auditor and a Certified Fraud Examiner. (N-31 and Ben Sanders Testimony)
772. Denise Sanders is an IT Project Manager for the Vermont Department of Education. She develops and supports information data systems. She also has a part-time business doing web site development. She plans to retire from the state in 2009 and build up her home business.
773. Mr. and Mrs. Sanders have both developed home based businesses beginning in 2003 with Denise doing website development work and Mr. Sanders in 2004 doing radio programming. (N-31 and Ben Sanders Testimony)
774. Mr. and Mrs. Sanders hope to begin partial retirement from their current full time jobs in a few years using these home businesses to help supplement their income. Many of their neighbors, the Holdens, McMullins, Hendricksons, and Porters, are either fully or partially retired now, and the Sanders look forward to joining them. (N-31 and Ben Sanders Testimony)
775. The impacts Mr. Sanders discussed during his testimony would be substantial now, as he gets a significant amount of vacation time which he mostly spends at home. These impacts will be even greater during their retirement. (N-31 and Ben Sanders Testimony)
776. Mr. and Mrs. Sanders' neighborhood is bucolic, with beautiful views as you drive in either direction on 100B. The Sanders live directly across from the Sainsburys' horse farm and the river is directly below them. From their windows and their deck they get a long view of the Mad River from where it curves around to the McMullin Farm to past the bridge by the USGS gauging station. (N-31 and Ben Sanders Testimony)

777. Mr. and Mrs. Sanders also have a partial view of 100B. From spring through fall they frequently see bikers and joggers using the road. Mr. and Mrs. Sanders also see people fishing this entire stretch of the river. Some anglers just stand by the Gauge dam while many park just below the Sanders residence and fly-fish the pools as they walk north down the river past the McMullin farm. When the water is high enough in the spring or in the summer and fall after significant rains Mr. and Mrs. Sanders often see canoes and kayaks. (N-31 and Ben Sanders Testimony)
778. Mr. Sanders presented pictures of the neighborhood and his frequent use areas on his property. Some of these demonstrate a typical foggy morning in the valley. (Exhibit N.10 and Ben Sanders Testimony)
779. Mr. and Mrs. Sanders spend a lot of time outdoors year round. They own 3 acres of land, approximately 2.5 acres of which are wooded. They have trails through the woods, and they spend time walking the trails, often crossing over to Rob Dansker's land where they hike with their two dogs. Mr. Dansker has over 600 acres that also abuts the Rivers property. Mr. and Mrs. Sanders have a brook that borders their property with Rivers that they have chairs next to. It's a very relaxing quiet place with the beautiful sound of a babbling brook. (Exhibit N.10, N31 and Ben Sanders Testimony)
780. Mr. and Mrs. Sanders also spend quality time in their front yard playing fetch with the dogs, hanging out on their deck or napping in their hammock. (Exhibit N.10, N31 and Ben Sanders Testimony)
781. Today the primary soundscape is the sound of Mr. and Mrs. Sanders' brook, the river, birds, and the wind, periodically interrupted by traffic on 100B. Of course, time spent

behind their home and back in their woods is even more removed from traffic noise, and the sounds of nature are greater. (N-31 and Ben Sanders Testimony)

782. Mr. Dickinson, Rivers' traffic expert, testified that peak traffic hours will generally be in the early morning and mid-day but could occur at other times. (N-31 and Ben Sanders Testimony, based upon R-5 & Direct and cross exam testimony of Roger Dickinson)

783. All traffic created by the proposed quarry will be new as it relates to the use of the haul road and quarry area. This includes all customer trucks, employee vehicles, and service vehicles such as the almost daily fuel truck. There is no traffic on the Rivers property currently except for an occasional use of 4-wheelers by the Applicant. Therefore, there is no interception, every vehicle's impact accessing the proposed site does not exist today. (N-31 and Ben Sanders Testimony, based upon R-5 & Direct and cross exam testimony of Roger Dickinson)

784. Michael Oman provided an estimation of the impact time per truck (see Pages 7 and 8 of Neighbor's Exhibit 1). The time it takes for a truck to slow down from 50 MPH to turn into the haul road, climb the steep haul road, then descend the haul road fully loaded, and accelerate back up to 50 MPH upon entering 100B is about 4 minutes and 50 seconds. This time period will increase somewhat over the life of the quarry (if permitted) as trucks have to access the phases of the quarry further away from the haul road. This was not disputed by the applicant during Act 250 hearings, nor during the hearings before this Court and therefore is an undisputed fact. The Applicant's expert, Dickinson, estimated the on-site time per truck to be approximately 5 minutes to load and be weighed. Therefore, there will be a total impact per truck accessing the site of 9 minutes and 50

seconds, or roughly ten minutes. (N-31 and Ben Sanders Testimony, based upon N-1 & Direct testimony of Michael Oman)

785. A truck passing by the residence of Mr. and Mrs. Sanders on Route 100B traveling 50 MPH has an estimated impact time of 25 seconds. This also was not disputed by the applicant. Therefore, if the round trip impact per truck visiting the quarry is 9:50 and a round trip pass by truck trip impact is 50 seconds, the net impact of an intercepted truck is about 9 minutes, over 10 times the current time impact. The impact of non-intercepted (new) trucks is the full 9 minutes and 50 seconds) (N-31 and Ben Sanders Testimony, based upon N-1 & Direct testimony of Michael Oman)
786. Using the Applicant's expert report (See R-5 Page 4) and using only the dump truck numbers, there will be maximum of 16 truck trip ends or 8 trucks per hour during a peak hour. The impact in a peak hour will be about 79 minutes (8 x 9:50), or constant truck impact for the entire hour. Of course the estimate of peak hour could be higher. Since it takes 5 minutes to load a truck, they could load 12 trucks per hour, and some could even be queuing up waiting their turn. (N-31 and Ben Sanders Testimony, based upon R-5 & Direct and cross exam testimony of Roger Dickinson)
787. Each and every vehicle accessing the proposed quarry is new traffic as it relates to the impact on Mr. and Mrs. Sanders' neighborhood. Mr. and Mrs. Sanders will hear them slowing down, turning into the site and grinding their way up the steep haul road producing substantial noise and diesel exhaust. (N-31 and Ben Sanders Testimony, based upon R-5, N-1 & Direct and cross exam testimony of Roger Dickinson & Michael Oman)
788. Mr. Sanders is not an air pollution expert, but provided common sense testimony that a truck at a light or climbing up a hill produces lots of smoke coming from its exhaust as it

tries to accelerate, substantially more to the naked eye than when it is cruising by at 50 mph. A truck is also very loud when it is accelerating. (N-31 and Ben Sanders Testimony)

789. Once customer trucks reach the quarry, Mr. and Mrs. Sanders will hear them being filled as the stone hits the bare metal truck bed and sides, then they will hear them braking their way down the steep road and once again as they undertake loud and exhaust-filled acceleration to get up to 50 mph. (N-31 and Ben Sanders Testimony)

790. As the customer trucks exit the site, the trucks will also create a spilled stone and dust impact. The Applicant states it will inspect the entrance twice daily, but stone will spill between these times and pose a hazard to the bikers and motorcycles. The danger associated with slow moving trucks entering and exiting the site will also impact use of 100B. (N-31 and Ben Sanders Testimony)

791. Air inversions, heavy fog, and low lying clouds are a frequent occurrence in the Sanders' part of the Mad River valley. During the shoulder seasons and winter they can see and smell the inversions when Neighbors' chimney smoke moves sideways and down instead of up. When it's not heating season, inversions are apparent by the smell of exhaust from vehicles on 100B that stays close to the ground. When Rivers had burns on its property, the Sanders smelled the smoke and experienced ash raining down on their roof during inversions. (N-31 and Ben Sanders Testimony)

792. Fog or low lying clouds occur more often than clear mornings in the Sanders' part of the Mad River valley. They see it roll in late afternoon/early evening and it often does not burn off until mid-morning. On inclement days it can stay around all day. These fogs can be very local. Some days as Mr. Sanders drives through a thick fog by his house he is out

of it by the time he reaches the intersection of 100B and Route 2. (N-31 and Ben Sanders Testimony)

793. On these frequent inversion days, exhaust from 100B stays low to the ground. All of the new traffic visiting the proposed quarry, especially during the expected peaks in the early morning, will produce diesel exhaust that will stay close to the ground, affecting the quality of the air breathed by the Sanders and their closest neighbors (the Holdens, Byrne/Farley, McMullins, Hendricksons and Porters). (N-31 and Ben Sanders Testimony)

794. While the EPA thresholds may not be exceeded according to the Applicant's model, which used a 24 hour averaging and didn't take into account the area's unique geography and climatology, the Sanders' air quality will suffer from the diesel exhaust, which is a known carcinogen and smells bad. Moretown Zoning Regulations § 4.10 (A) and (B)(4) do protect neighboring properties and uses from this adverse impact. (Note- these 4.10 sections do not state the phrase 'undue' adverse – just adverse). (N-31 and Ben Sanders Testimony)

795. The Applicant and its experts have tried very hard to convince the Court and the Neighbors that the quarry will not be louder than 100B. However the Applicant did not take into account noise from trucks on the access road or the altered frequency, duration or character of the noise coming from the proposed quarry and its customers. (N-31 and Ben Sanders Testimony)

796. As it gets built out, the quarry will essentially become a high elevation stone walled amphitheater. Church bells are put high up in the steeples and alarms are put high up on poles or buildings in order to provide maximum volume over longer distance. This quarry

will be broadcasting its heavy industrial noise across and down the valley in the same manner. (N-31 and Ben Sanders Testimony)

797. When Ben Sanders sits on his deck or in his living room now he can hear an occasional truck pass by, perhaps 5-10 in a peak hour, much less on average. He is impacted by these trucks for about 25 seconds each or about 4 minutes or less in a peak hour. The noise impact from passenger cars and light trucks is considerably less. In between truck pass-bys it is very quiet. Mr. Sanders can hear the water from the Mad River and the brook, the birds, and the wind. The quarry noises would fill in all of these quiet times so instead the Sanders would have ten straight hours of heavy industrial noise. Instead of 4 minutes of noise per hour they would have 60 minutes. That is a huge difference not accounted for in the experts' models.
798. The Applicant proposes up to 5 hours of equipment noise on Saturday mornings when they will do maintenance. (N-31 and Ben Sanders Testimony)
799. The Applicant's noise expert claims in his model that the woods are dense. This is not correct. Mr. Hendrickson and Mr. Sanders put up sheets tied to trees at the Holden/Rivers border. While doing this, they could see the Rivers test blast site from the Holden property line. (N-31 and Ben Sanders Testimony)
800. During the site visit Mr. Hendrickson and Mr. Sanders pointed out these sheets to Judge Durkin when the group was standing in the approximate area of the proposed scales. They could be clearly seen and the Court could see that they had wording on them. The distance to the signs from this point is over 200 feet, perhaps 220 feet. For it to be considered dense you should have no line of sight, much less see a sign and note it had wording on it. (N-31 and Ben Sanders Testimony)

801. As the proposed project is designed, lots of trees will be removed to create the ponds and the scales area, as well as along the entire haul road so that it can be widened. (N-31 and Ben Sanders Testimony)
802. Another factor in assessing noise is the unique characteristics of the Mad River Valley where the Sanders live. This is probably the narrowest portion of the valley in terms of both the height and closeness of the hillsides. Sound travels incredibly well in this area especially in certain weather conditions. Ben Sanders can hear the applicant ride his 4 wheeler all the way to the top of his property. He can hear someone up on the Common Road mowing their lawn. He can hear the Sainsbury or McMullin horses neighing or their dogs barking. There is also an echo effect of sound bouncing off the opposite hillside, especially on Old Route 100, across from the proposed quarry, where the hillsides are closest. Mr. Sanders believes that the actual noise levels will be higher than either noise expert has estimated due to the unique aspects of the location. (N-31 and Ben Sanders Testimony)
803. The Applicant's noise expert failed to model the impacts of one or more trucks on the haul road. This noise from trucks on the access road is a major portion of the proposed operation, and if it is included it results in violations of both the Moretown and Act 250 noise standards. (N-31 and Ben Sanders Testimony)
804. Ken Kaliski corrected the omission of access road noise (see N.2 Page 12 figure 9) by using the applicant's model and adding two trucks passing each other on the haul road, a condition expected to occur on a regular basis. The noise these trucks would produce exceeds 60dBA at both the McMullin and Byrne/Farley residences. On peak days and

peak hours this will be a frequent occurrence since trucks will be impacting the site for 9:50 each.

805. Bob McMullin has often told the Sanders, and testified here, that he relishes his early afternoon naps on his porch after lunch, which also happens to be the time the Applicant's traffic expert states as the second peak time for a quarry each day. Ben Sanders enjoys his vacation time naps and he is looking forward to his "retirement naps" – but those will not be possible if the quarry goes in. (N-31 and Ben Sanders Testimony)
806. The Applicant also failed to model the construction noise for creating the line of sight on 100B, or for constructing the haul road. Moretown Zoning Regulations only exempts earth extraction review for the construction buildings. Construction activities for this proposal are not exempt. (See Moretown Zoning Regulations § 3.5(A), N-31 and Ben Sanders Testimony)
807. When this construction impact was modeled by Ken Kaliski, it produced noise levels exceeding 65 at the McMullin and Byrne/Farley residences. (see N.2 Page 15 Section 3.3, (N-31 and Ben Sanders Testimony)
808. The Court heard testimony that an increase of ten dBA is a doubling of the noise level. Therefore the construction noise will be more than double the 55dba level sometimes used in Act 250 and well more than double the 50dba level used in other Act 250 cases. (N-31 and Ben Sanders Testimony)
809. The qualitative aspects of sound and noise were not covered by either noise expert nor was it considered by the Applicant's aesthetics expert. However, for people who hear the current sound levels and would be subjected to the applicant's proposed quarry noises and customer truck noise, the comparison is stark. The proposed quarry would produce

heavy industrial noise for ten hours per day. Crushing of stone, drilling, loading of trucks, trucks on the haul road etc. would be relatively constant. On some days most of the noise sources could be happening at the same time. These noises will not just be a constant engine drone; there will be lots of sharp sudden noises. (N-31 and Ben Sanders Testimony)

810. During an Act 250 site visit, the Applicant had a drill at the site for a noise demonstration while the Commission members and group were standing up on the Common Road on the other side of the valley. The demonstration was very brief, but the horrific screech the drill made as it hit the rock was clearly audible. The Neighbors can expect this to happen every time Rivers drills a hole. (N-31 and Ben Sanders Testimony)
811. There will also be the horrible metal on rock noise when earth movers scrape earth off stone in order to set up for drilling. Also, the sudden noise of stone being dropped into an empty truck bed from a loader will be jarring. (N-31 and Ben Sanders Testimony)
812. All of these heavy industrial noises, both constant and sudden, will be broadcast from this stone amphitheater, filling in the quiet times the Neighbors currently experience for 8 months a year, over 33 years. This noise would be incompatible with the existing uses in the surrounding area and would violate Moretown Zoning Regulations Section 4.10 (B) (1). (N-31 and Ben Sanders Testimony)
813. The Sanders well has a yield of approx. 20 GPM. It is very high quality and has an excellent taste. It also makes incredible beer, a very good indication of the quality of well water. It has been tested 3 times. In 1988 when the Sanders moved in, again after their well was hit by lightning in 1994 and lastly, in the Spring of 2007, when the Friends of the Mad River offered discount testing as part of a valley wide study. Each time their

well passed with flying colors with no quality issues whatsoever. (N-31 and Ben Sanders Testimony)

814. Don Maynard found numerous fractures during his two site visits, taking in-the-field measurements to supplement his photo analysis. During the site visit there were at least two occasions where Mr. Maynard pointed these fractures out to the Court. Mr. Maynard also pointed out that there was water in the Rivers test well. (N-31 and Ben Sanders Testimony)

815. The quarry floor will be fractured from natural conditions and from blasting. The forebay pond will not be lined, and the retention pond is only partially lined and with a permeable clay liner which is likely to be disturbed. The water will be taken from the pond and used over and over concentrating any pollutants from the quarry floor and dust suppression activities. (N-31 and Ben Sanders Testimony)

816. Refueling of equipment will be done on an almost daily basis. Any equipment leaks, or spills during re-fueling could end up in this retention pond water or infiltrate directly through the quarry floor. The Applicant asserts that 100% of all of the highly toxic substances used in blasting, over 8,000 lbs. per blast or 96,000 lbs per year for 33 years, will be completely consumed and therefore would not make it into the Neighbros' aquifer. According to the applicant, there will be no misfires, no unexpected voids where the emulsion could flow and go unexploded, and no flaws in the products themselves. While it is admirable to strive for perfection, perfection on paper often is not borne out when implemented on the ground, and any leaks, spills, misfires or accidents could cause contamination of the underlying aquifer that would last for decades. (N-31 and Ben Sanders Testimony)

817. Rivers' proposed protection for the Sanders' well is to test their well once a year for the first 3 years and then every 5 years thereafter (see R-90 page 6). If Rivers finds something, it will already be too late for the Sanders. Their well would already be contaminated, and they would have been drinking it unaware for some period of time, especially after the first three years when the testing intervals are five years apart. This testing plan is not a preventative measure. (N-31 and Ben Sanders Testimony)
818. The Applicant has not applied for the ANR underground injection control and/or indirect discharge permits that could provide the Neighbors with an early warning of pollutants entering their aquifer by requiring the creation of a Design Management Zone with sentinel wells. N-31 and Ben Sanders Testimony)
819. The Sanders are very concerned about potential pond failure during major storm events and after quarry closure when the applicant no longer uses the captured water for his operations. The pond will fill with sediment over time, leading to potential failure if not maintained properly after closure of operations. There is no bond or reclamation plan that provides for maintenance of the pond after the quarry is closed. The Applicant's forester testified that organic material will constantly be added to the site via dying leaves, pine needles, airborne dust etc. These will land directly in the pond and during storms be washed into the pond and fill it over time. When the outlet eventually gets clogged and enough pressure builds up something will have to give. This failure would result in approximately 1.1 million gallons of water rushing down onto 100B and Old Rt 100. (N-31 and Ben Sanders Testimony)
820. Blasting will increase the fracturing of the rock on the property, including the quarry floor allowing contaminants to infiltrate and pollute the aquifer that the Neighbors draw

their water from. But the biggest danger testified to by Tim Rath, the Applicant's expert, and the Neighbors' fact witness, Art Hendrickson, is flyrock. (N-31 and Ben Sanders Testimony)

821. The Court heard from Mr. Rath that flyrock can travel in any direction. We learned from Mr. Rath that there are numerous possible causes of flyrock, and there is no way to prevent flyrock. There are methods that can help reduce the risk, but there will still be many factors that cannot be seen or measured by the driller or blaster that could cause it. (N-31 and Ben Sanders Testimony)

822. All of the factors that can cause flyrock as testified to by Mr. Rath, are in addition to the potential for human error, such as the driller or blaster getting distracted at a critical moment and missing something that could clue them into a problem. There is also potential failure of the explosive materials or detonators themselves. (N-31 and Ben Sanders Testimony)

823. Mr. Rath stated that he would request all residents within 1,500 feet to stay in their home during a blast. The Sanders live 1,200 feet away from Phase 1 and the quarry will move to approximately 886 feet from an area of frequent use on the Sanders property during phase 4 and 5. Mr. and Mrs. Sanders should not have to hide in their home when Rivers wants to blast. Nor would their asphalt shingles and plywood sheathing stop a baseball or football size flyrock traveling over 200 MPH. (N-31 and Ben Sanders Testimony)

824. People driving along 100B, just over 900 feet away from the quarry site, will not be warned of the danger of flyrock. VTrans will not allow the Applicant to stop traffic when creating their line of sight as stated in their Letter of Intent, (See R-6), and will not allow

- them to stop traffic on 100B every time they want to blast. (N-31 and Ben Sanders Testimony)
825. No matter how hard the Applicant tries there is no way it can ensure that the Neighbors and users of 100B will be safe from flyrock. (N-31 and Ben Sanders Testimony)
826. Throughout all the hearings at all levels for this application, the Applicant has frequently made changes, almost always at the last minute before or even during a hearing. While these changes have caused the Neighbors and the Town considerable time and expense re-evaluating this constantly moving target they have not changed the fundamental risks and impacts this project would create. (N-31 and Ben Sanders Testimony)
827. The Neighbors and the traveling public would bear the risks associated with this project, including the risk of flyrock. (N-31 and Ben Sanders Testimony)
828. The Neighbors would also have their current peaceful soundscape change to ten hours of industrial noise, 5 days a week, 8 months a year for 33 years. (N-31 and Ben Sanders Testimony)
829. The Sanders and their neighbors have all lived for some time in their agricultural and residential neighborhood, with horse farms and a beautiful landscape devoid of any heavy industry. (N-31 and Ben Sanders Testimony)
830. Moretown Town Plan Land Use Policy #5 states *“Development within the Route 100B corridor should be compatible with the existing character of that area, as defined by the open, agrarian landscape with scattered residential and agricultural buildings.”*
831. The Sanders are not opposed to all development on the Rivers parcel and they encouraged, and still encourage, Mr. Rivers to build houses or propose another use that

would make him money while maintaining the residential and agricultural character of the area. (N-31 and Ben Sanders Testimony)